

Drive shaft 3-part

Product information | Technical data sheet

Jansen Steel Tubes and Mubea Precision Steel Tubes produce welded-drawn precision steel tubes made of high-tensile materials for three-part drive shafts.

Tubes for the 3-part drive shafts are welded to other components to form one unit. Consequently, there are stringent requirements to dimensional tolerance, roundness, end

processing qualities and the tubes' welding characteristics. The trend of light-weight design is increasingly demanding high-tensile materials.



Tube requirements

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| High strength values (elongation at break, tensile strength) |
| High torsional strength and durability |
| Very good welding properties |
| High geometrical accuracy (eccentricity, roundness) |
| Excellent surface condition |

Material properties

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| High torsional strength and fatigue strength |
| Homogeneous strength properties and ductility |
| Very good suitability for welding |
| Potential to reduce wall thickness |

Structure

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| Homogeneous, fine-grain structure in weld seam and basic material |
| Minimised surface decarburisation of inner and outer surfaces (< 100 µm) |
| Excellent weld seam quality |

Geometry

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| Minimised fluctuations in wall thickness and inner/outer diameter |
| Minimised deviations in straightness |
| Minimised deviations in concentricity and axial run-out |
| Minimised eccentricity |
| Specific tube end processing: sawn/brushed; chamfered, completely processed/chamfered |

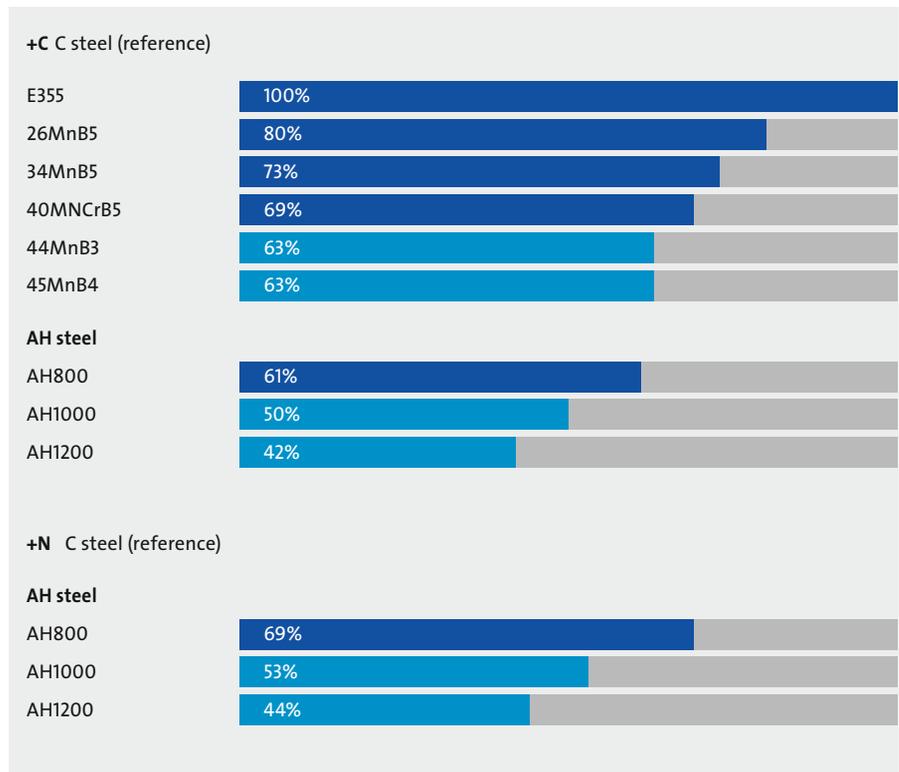
Surface

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|---|
| Excellent surface condition |
| Minimised surface flaws (adhesions, scratches, dents, etc.) |
| Minimised corrosion protection, optionally specific corrosion protection |

Materials & dimensions

| Application | Tube standard | Steel grades | Delivery condition | Dimensions range mm |
|-------------------------|---------------|--------------|--------------------|--------------------------------|
| Drive shaft (3-part) | ✓ EN 10305-2 | ✓ E355 | ✓ +C | ✓ OD 22 - 35 ✓ WT 2.5 - 5.5 |
| | | ✓ 26MnB5 | | |
| | | ✓ 34MnB5 | | |
| | | ✓ 40MnCrB5 | | |
| | | * 44MnB3 | | |
| | | * 45MnB4 | | |
| | | ✓ AH800 | ✓ +C | |
| | | * AH1000 | ✓ +N | |
| | | * AH1200 | | |

Extract from achievable weight-savings



✓ ■ Series production
* ■ In validation

AH: air hardening

OD: outside diameter
WT: wall thickness